Graham M Nicholson

List of Publications by Year
in descending order

93	4,268	81900 39	114465 63
papers	citations	h-index	g-index
97	97	97	2676
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A rational nomenclature for naming peptide toxins from spiders and other venomous animals. Toxicon, 2008, 52, 264-276.	1.6	276
2	Spider-venom peptides that target voltage-gated sodium channels: Pharmacological tools and potential therapeutic leads. Toxicon, 2012, 60, 478-491.	1.6	202
3	Discovery and characterization of a family of insecticidal neurotoxins with a rare vicinal disulfide bridge. Nature Structural Biology, 2000, 7, 505-513.	9.7	194
4	Spider-Venom Peptides as Bioinsecticides. Toxins, 2012, 4, 191-227.	3.4	190
5	ArachnoServer 2.0, an updated online resource for spider toxin sequences and structures. Nucleic Acids Research, 2011, 39, D653-D657.	14.5	159
6	Venomics: unravelling the complexity of animal venoms with mass spectrometry. Journal of Mass Spectrometry, 2008, 43, 279-295.	1.6	138
7	Ciguatoxins: Cyclic Polyether Modulators of Voltage-gated Iion Channel Function. Marine Drugs, 2006, 4, 82-118.	4.6	115
8	The Biochemical Toxin Arsenal from Ant Venoms. Toxins, 2016, 8, 30.	3.4	113
9	Fighting the global pest problem: Preface to the special Toxicon issue on insecticidal toxins and their potential for insect pest control. Toxicon, 2007, 49, 413-422.	1.6	99
10	Unique scorpion toxin with a putative ancestral fold provides insight into evolution of the inhibitor cystine knot motif. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10478-10483.	7.1	96
11	Peptide toxins that selectively target insect Na_Vand Ca_Vchannels. Channels, 2008, 2, 100-116.	2.8	95
12	Diversity of peptide toxins from stinging ant venoms. Toxicon, 2014, 92, 166-178.	1.6	92
13	Insect-selective spider toxins targeting voltage-gated sodium channels. Toxicon, 2007, 49, 490-512.	1.6	81
14	Discovery and Structure of a Potent and Highly Specific Blocker of Insect Calcium Channels. Journal of Biological Chemistry, 2001, 276, 40306-40312.	3.4	79
15	Structure and function of Î´-atracotoxins: lethal neurotoxins targeting the voltage-gated sodium channel. Toxicon, 2004, 43, 587-599.	1.6	79
16	Characterisation of the effects of robustoxin, the lethal neurotoxin from the Sydney funnel-web spider Atrax robustus, on sodium channel activation and inactivation. Pflugers Archiv European Journal of Physiology, 1998, 436, 117-126.	2.8	76
17	Block of voltage-gated potassium channels by Pacific ciguatoxin-1 contributes to increased neuronal excitability in rat sensory neurons. Toxicology and Applied Pharmacology, 2005, 204, 175-186.	2.8	75
18	Modification of sodium channel gating and kinetics by versutoxin from the Australian funnel-web spiderHadronyche versuta. Pflugers Archiv European Journal of Physiology, 1994, 428, 400-409.	2.8	73

#	Article	IF	Citations
19	Unravelling the complex venom landscapes of lethal Australian funnel-web spiders (Hexathelidae:) Tj ETQq1 1 0.784314 rgBT /Overloc	2.4	73
20	Spiders of medical importance in the Asia-Pacific: Atracotoxin, latrotoxin and related spider neurotoxins. Clinical and Experimental Pharmacology and Physiology, 2002, 29, 785-794.	1.9	67
21	Weaponization of a Hormone: Convergent Recruitment of Hyperglycemic Hormone into the Venom of Arthropod Predators. Structure, 2015, 23, 1283-1292.	3.3	66
22	The Ï‰-atracotoxins: Selective blockers of insect M-LVA and HVA calcium channels. Biochemical Pharmacology, 2007, 74, 623-638.	4.4	63
23	Direct Visualization of Disulfide Bonds through Diselenide Proxies Using ⁷⁷Se NMR Spectroscopy. Angewandte Chemie - International Edition, 2009, 48, 9312-9314.	13.8	63
24	A distinct sodium channel voltage-sensor locus determines insect selectivity of the spider toxin Dc1a. Nature Communications, 2014, 5, 4350.	12.8	63
25	Î´-Atracotoxins from Australian funnel-web spiders compete with scorpion Î±-toxin binding on both rat brain and insect sodium channels. FEBS Letters, 1998, 439, 246-252.	2.8	61
26	Structural venomics reveals evolution of a complex venom by duplication and diversification of an ancient peptide-encoding gene. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11399-11408.	7.1	59
27	Solution structure of a defensin-like peptide from platypus venom. Biochemical Journal, 1999, 341, 785-794.	3.7	57
28	Isolation and pharmacological characterisation of Î´-atracotoxin-Hv1b, a vertebrate-selective sodium channel toxin. FEBS Letters, 2000, 470, 293-299.	2.8	56
29	Red-back spider (Latrodectus hasselti) antivenom prevents the toxicity of widow spider venoms. Annals of Emergency Medicine, 2001, 37, 154-160.	0.6	55
30	Selective alteration of sodium channel gating by Australian funnel-web spider toxins. Toxicon, 1996, 34, 1443-1453.	1.6	53
31	Arachnid toxinology in Australia: From clinical toxicology to potential applications. Toxicon, 2006, 48, 872-898.	1.6	47
32	Scorpion Î± and Î±-like toxins differentially interact with sodium channels in mammalian CNS and periphery. European Journal of Neuroscience, 2000, 12, 2823-2832.	2.6	46
33	Isolation of a funnel-web spider polypeptide with homology to mamba intestinal toxin 1 and the embryonic head inducer Dickkopf-1. Toxicon, 2000, 38, 429-442.	1.6	46
34	Î´-Atracotoxins from Australian Funnel-web Spiders Compete with Scorpion Î±-Toxin Binding but Differentially Modulate Alkaloid Toxin Activation of Voltage-gated Sodium Channels. Journal of Biological Chemistry, 1998, 273, 27076-27083.	3.4	44
35	Neurotoxic activity of venom from the Australian Eastern mouse spider (Missulena bradleyi) involves modulation of sodium channel gating. British Journal of Pharmacology, 2000, 130, 1817-1824.	5.4	44
36	Cross-reactivity of Sydney funnel-web spider antivenom: neutralization of the in vitro toxicity of other Australian funnel-web (Atrax and Hadronyche) spider venoms. Toxicon, 2002, 40, 259-266.	1.6	42

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37	Clinical and in vitro evidence for the efficacy of Australian red-back spider (Latrodectus hasselti) antivenom in the treatment of envenomation by a Cupboard spider (Steatoda grossa). Toxicon, 2002, 40, 767-775.	1.6	42
38	Differential blockade of neuronal voltage-gated Na+ and K+ channels by antidepressant drugs. European Journal of Pharmacology, 2002, 452, 35-48.	3.5	41
39	Discovery of an MIT-like atracotoxin family: Spider venom peptides that share sequence homology but not pharmacological properties with AVIT family proteins. Peptides, 2005, 26, 2412-2426.	2.4	41
40	Intersexual variations in Northern (Missulena pruinosa) and Eastern (M. bradleyi) mouse spider venom. Toxicon, 2008, 51, 1167-1177.	1.6	41
41	The Janusâ€faced atracotoxins are specific blockers of invertebrate K_{Ca} channels. FEBS Journal, 2008, 275, 4045-4059.	4.7	38
42	Cloning and activity of a novel Î±-latrotoxin from red-back spider venom. Biochemical Pharmacology, 2012, 83, 170-183.	4.4	38
43	Defensin-like peptide-2 from platypus venom: member of a class of peptides with a distinct structural fold. Biochemical Journal, 2000, 348, 649.	3.7	35
44	CSTX-1, a toxin from the venom of the hunting spider Cupiennius salei, is a selective blocker of L-type calcium channels in mammalian neurons. Neuropharmacology, 2007, 52, 1650-1662.	4.1	35
45	The insecticidal spider toxin <scp>SFI</scp>1 is a knottin peptide that blocks the pore of insect voltageâ€gated sodium channels via a large Î²â€hairpin loop. FEBS Journal, 2015, 282, 904-920.	4.7	34
46	Neuroprotectant effects of iso-osmolar d-mannitol to prevent Pacific ciguatoxin-1 induced alterations in neuronal excitability: A comparison with other osmotic agents and free radical scavengers. Neuropharmacology, 2005, 49, 669-686.	4.1	33
47	The insecticidal neurotoxin Aps III is an atypical knottin peptide that potently blocks insect voltage-gated sodium channels. Biochemical Pharmacology, 2013, 85, 1542-1554.	4.4	33
48	Synthesis, Solution Structure, and Phylum Selectivity of a Spider Î´-Toxin That Slows Inactivation of Specific Voltage-gated Sodium Channel Subtypes. Journal of Biological Chemistry, 2009, 284, 24568-24582.	3.4	32
49	The complexity and structural diversity of ant venom peptidomes is revealed by mass spectrometry profiling. Rapid Communications in Mass Spectrometry, 2015, 29, 385-396.	1.5	32
50	Variations in receptor site-3 on rat brain and insect sodium channels highlighted by binding of a funnel-web spider Î´-atracotoxin. FEBS Journal, 2002, 269, 1500-1510.	0.2	31
51	Isolation of Î´-missulenatoxin-Mb1a, the major vertebrate-active spider Î´-toxin from the venom ofMissulena bradleyi(Actinopodidae)1. FEBS Letters, 2003, 554, 211-218.	2.8	31
52	Venom Peptide Repertoire of the European Myrmicine Ant <i>Manica rubida</i>: Identification of Insecticidal Toxins. Journal of Proteome Research, 2020, 19, 1800-1811.	3.7	30
53	Solution structure of a defensin-like peptide from platypus venom. Biochemical Journal, 1999, 341, 785.	3.7	28
54	Elucidation of the unexplored biodiversity of ant venom peptidomes via MALDIâ€“TOF mass spectrometry and its application for chemotaxonomy. Journal of Proteomics, 2014, 105, 217-231.	2.4	28

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55	Molecular basis of the remarkable species selectivity of an insecticidal sodium channel toxin from the African spider Augacephalus ezendami. Scientific Reports, 2016, 6, 29538.	3.3	25
56	Synthesis and Characterization of Î´-Atracotoxin-Ar1a, the Lethal Neurotoxin from Venom of the Sydney Funnel-Web Spider (Atrax robustus)â€. Biochemistry, 2003, 42, 12933-12940.	2.5	24
57	Characterisation of the heterotrimeric presynaptic phospholipase A2 neurotoxin complex from the venom of the common death adder (Acanthophis antarcticus). Biochemical Pharmacology, 2010, 80, 277-287.	4.4	22
58	Combined Peptidomic and Proteomic Analysis of Electrically Stimulated and Manually Dissected Venom from the South American Bullet Ant Paraponera clavata. Journal of Proteome Research, 2017, 16, 1339-1351.	3.7	22
59	A Novel Family of Insect-Selective Peptide Neurotoxins Targeting Insect Large-Conductance Calcium-Activated K⁺ Channels Isolated from the Venom of the Theraphosid Spider <i>Eucratoscelus constrictus</i>. Molecular Pharmacology, 2011, 80, 1-13.	2.3	21
60	Comparisons of Protein and Peptide Complexity in Poneroid and Formicoid Ant Venoms. Journal of Proteome Research, 2016, 15, 3039-3054.	3.7	20
61	Venom toxicity and composition in three Pseudomyrmex ant species having different nesting modes. Toxicon, 2014, 88, 67-76.	1.6	19
62	An Integrated Proteomic and Transcriptomic Analysis Reveals the Venom Complexity of the Bullet Ant Paraponera clavata. Toxins, 2020, 12, 324.	3.4	18
63	Actions of pentobarbitone and derivatives with modified 5-butyl substituents on GABA and diazepam binding to rat brain synaptosomal membranes. Neurochemical Research, 1983, 8, 1337-1350.	3.3	16
64	Î±-Elapitoxin-Aa2a, a long-chain snake Î±-neurotoxin with potent actions on muscle (Î±1)2Î²Î³Î´ nicotinic receptors, lacks the classical high affinity for neuronal Î±7 nicotinic receptors. Biochemical Pharmacology, 2011, 81, 314-325.	4.4	16
65	Do Vicinal Disulfide Bridges Mediate Functionally Important Redox Transformations in Proteins?. Antioxidants and Redox Signaling, 2013, 19, 1976-1980.	5.4	16
66	Lethal effects of an insecticidal spider venom peptide involve positive allosteric modulation of insect nicotinic acetylcholine receptors. Neuropharmacology, 2017, 127, 224-242.	4.1	16
67	Isolation of two insecticidal toxins from venom of the Australian theraphosid spider Coremiocnemis tropix. Toxicon, 2016, 123, 62-70.	1.6	14
68	Presynaptic snake Î²-neurotoxins produce tetanic fade and endplate potential run-down during neuromuscular blockade in mouse diaphragm. Naunyn-Schmiedeberg's Archives of Pharmacology, 1997, 356, 626-634.	3.0	13
69	Pharmacological characterization of Î±-elapitoxin-Al2a from the venom of the Australian pygmy copperhead (Austrelaps labialis): An atypical long-chain Î±-neurotoxin with only weak affinity for Î±7 nicotinic receptors. Biochemical Pharmacology, 2012, 84, 851-863.	4.4	13
70	Antivenoms for the Treatment of Spider Envenomation. Toxin Reviews, 2003, 22, 35-59.	1.5	11
71	Differing actions of convulsant and nonconvulsant barbiturates: An electrophysiological study in the isolated spinal cord of the rat. Neuropharmacology, 1988, 27, 459-465.	4.1	10
72	Characterization of monomeric and multimeric snake neurotoxins and other bioactive proteins from the venom of the lethal Australian common copperhead (Austrelaps superbus). Biochemical Pharmacology, 2013, 85, 1555-1573.	4.4	10

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73	Insect-Active Toxins with Promiscuous Pharmacology from the African Theraphosid Spider Monocentropus balfouri. Toxins, 2017, 9, 155.	3.4	10
74	TIME COURSE AND REGIONAL DISTRIBUTION OF CORTICAL CHANGES DURING ACUTE ALCOHOL INGESTION. International Journal of Neuroscience, 2004, 114, 863-878.	1.6	9
75	Presence of presynaptic neurotoxin complexes in the venoms of Australo-Papuan death adders (Acanthophis spp.). Toxicon, 2010, 55, 1171-1180.	1.6	9
76	Nerveâ€“muscle activation by rotating permanent magnet configurations. Journal of Physiology, 2016, 594, 1799-1819.	2.9	9
77	Depolarizing actions of convulsant barbiturates on isolated rat dorsal root ganglion cells. Neuroscience Letters, 1988, 93, 330-335.	2.1	7
78	Efficacy of Australian red-back spider (Latrodectus hasselti) antivenom in the treatment of clinical envenomation by the cupboard spider Steatoda capensis (Theridiidae). Toxicon, 2014, 86, 68-78.	1.6	7
79	Evaluation of Chemical Strategies for Improving the Stability and Oral Toxicity of Insecticidal Peptides. Biomedicines, 2018, 6, 90.	3.2	7
80	SPider Neurotoxins Targeting Voltage-Gated Sodium Channels. Toxin Reviews, 2005, 24, 315-345.	3.4	7
81	Identification of presynaptic neurotoxin complexes in the venoms of three Australian copperheads (Austrelaps spp.) and the efficacy of tiger snake antivenom to prevent or reverse neurotoxicity. Toxicon, 2011, 58, 439-452.	1.6	6
82	Frequency-dependent neuromuscular blockade by textilotoxin in vivo. Toxicon, 1991, 29, 1266-1269.	1.6	5
83	Label-Free, Real-Time Phospholipase-A Isoform Assay. ACS Biomaterials Science and Engineering, 2020, 6, 4714-4721.	5.2	5
84	Effects of a depressant/convulsant pair of glutarimides on neuronal activity in the isolated spinal cord of the immature rat. Neuropharmacology, 1985, 24, 461-464.	4.1	4
85	Spider Neurotoxins Targeting Voltage-Gated Sodium Channels. Toxin Reviews, 2005, 24, 313-343.	3.4	4
86	Strychnine-like action of the convulsant barbiturate, CHEB. Neuropharmacology, 1985, 24, 465-471.	4.1	3
87	Spider Venom Peptides. , 2006, , 369-379.		3
88	Spider Peptides. , 2013, , 461-472.		3
89	Calcium-dependent actions of the convulsant barbiturate, CHEB, on transmitter release at the rat neuromuscular junction. General Pharmacology, 1990, 21, 741-746.	0.7	2
90	Reply from Peter A. Watterson and Graham M. Nicholson. Journal of Physiology, 2016, 594, 3843-3844.	2.9	1

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91	Spider toxins: A new group of potassium channel modulators. Journal of Computer - Aided Molecular Design, 1999, 15/16, 61-69.	1.0	0
92	Structural characterization of protein toxins from Australian snake venoms using native mass spectrometry. Toxicon, 2019, 158, S43.	1.6	0
93	Insulin Trafficking in a Glucose Responsive Engineered Human Liver Cell Line is Regulated by the Interaction of ATP-Sensitive Potassium Channels and Voltage-Gated Calcium Channels. , 0, , .		0